

## **LISTING OF THE CLAIMS**

1-2. (Cancelled)

3. (Previously presented) In an on-line network environment, a method for operating a network management system (NMS), the method comprising:

receiving a trap message from an agent, the agent having a management information base (MIB) information associated therewith;

in response to receiving the trap message, transmitting to the agent a request to perform a walk operation, wherein the NMS receives the MIB information via the walk operation;

updating the received MIB information; and

transmitting at least part of the updated MIB information to the agent.

4. (Previously presented) The method of claim 3, wherein the agent stores the MIB information.

5. (Previously presented) The method of claim 3, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

6. (Previously presented) The method of claim 3, further comprising updating the MIB information to be synchronized with a second MIB.

7. (Cancelled)

8. (Previously presented) In an on-line network environment, a method for operating an agent, the method comprising:

determining that a change has occurred to management information base (MIB) information associated with the agent;

in response to determining that the change has occurred to the MIB information associated with the agent, transmitting a trap message to a network management system (NMS);

receiving a request to perform a walk operation from the NMS, wherein the walk operation provides the MIB information to the NMS; and

receiving at least part of the MIB information from the NMS, wherein the at least part of the MIB information was updated by the NMS.

9. (Previously presented) The method of claim 8, wherein the agent stores the MIB information.

10. (Previously presented) The method of claim 8, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

11-12. (Cancelled)

13. (Previously presented) The method of claim 8, wherein determining that the change has occurred comprises determining a change to an object identifier (OID) has occurred.

14. (Previously presented) A system comprising:  
a network management system (NMS) comprising a computing device; and  
an NMS management information base (MIB), wherein the NMS is configured to receive a trap message from an agent that has access to an agent MIB, in response to receiving the trap message, conduct a walk operation on the agent MIB, and based on a result of the walk operation, update the NMS MIB, wherein the NMS is further configured to transmit at least part of the updated NMS MIB to the agent.

15. (Previously presented) The system of claim 14, wherein the NMS stores the NMS MIB and the agent stores the agent MIB.

16. (Previously presented) The system of claim 14, wherein the trap message is a simple network management protocol (SNMP) trap message and the walk operation is an SNMP walk operation.

17. (Previously presented) The system of claim 14, wherein the NMS updating the NMS MIB comprises the NMS updating the NMS MIB to be synchronized with the agent MIB.

18. (Cancelled)

19. (Previously presented) The method of claim 3, wherein the MIB information comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID), and wherein performing the walk operation comprises performing the walk operation on the meta MIB.

20. (Previously presented) The method of claim 8, further comprising:  
the agent conducting a walk operation on the MIB information; and  
based on results of the walk operation, the agent regenerating the MIB information.

21. (Previously presented) The method of claim 20, wherein the MIB information comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID); and wherein performing the walk operation comprises performing the walk operation on the meta MIB.

22. (Previously presented) The system of claim 14, wherein the agent MIB comprises a meta MIB comprising an object table and a trap table, wherein the meta MIB is configured to store an object identifier (OID); and wherein performing the walk operation comprises performing the walk operation on the meta MIB.